



#### GENERAL NOTES:

The intent of this plan is to provide steel guardrail posts on top of box culverts or similar situations when 3' of wood post embedment is not possible.

All steel post and connecting hardware necessary in the construction and installation of the adapter shall be galvanized.

Materials and methods of construction shall be in accordance with current Standard and Supplemental Specifications.

Contractor shall verify lengths of guardrail posts required for special adapters or he may elect to fabricate using a 6' post and adjust in the field as follows:

- Saw off top end to proper length and drill new holes.
- The sawed end and drilled holes shall be treated with two coats of organic zinc rich paint containing at least 94% zinc dust. The surfaces to be treated shall be free of oil residues due to sawing or drilling.

Refer to "Tabulation of Guardrail Installations" and applicable Standard Road Plans for additional details regarding installations of guardrail and special post with adapter.

The price bid for "Guardrail, Special Post Adapter Unit, RE-37," each, shall be considered full compensation for furnishing, assembling, and installing as detailed on this plan sheet.

List of materials for Guardrail, Special Post Adapter Unit:

- 1 - 10" x 5/8" x 6" A-36 Steel Plate
- 1 - 6" x 1/4" x 8" A-36 Steel Plate
- 4 - 3/4" x sufficient length ASTM A307 Hex Bolts.
- 8 - Washers

Materials included in the Installation of Guardrail bid item:

- W6 x 9 or W6 x 8.5 Steel Guardrail Post (variable length)
- 6"x8" Wood Spacer Block (14" or 21.5" length)

- 3/4" diameter A307 hex bolts with washers and nuts. Bolt length equals slab thickness plus 2". Field clip topside washers if necessary to clear weld.
- See Standard Road Plan RE-12C for guardrail spacer block and post attachment details and bolt sizes.
- Holes are to be made with equipment designed to cut through concrete and reinforcing steel.
- Any spalling will be grouted before placement of bottom plate. The grout shall consist of equal parts by weight of Portland cement and concrete sand, mixed with sufficient water to form a paste.
- Guardrail post shall be installed plumb. Any shims or other methods to insure vertical installation shall be considered incidental to "Guardrail, Special Post Adapter Unit, RE-37."

<b>STANDARD ROAD PLAN RE-37</b>	
REVISION: Revised name of bid item.	REVISION NO. 13
Mitchell J. Dillman 12-05-00	REVISION DATE 04-03-01
APPROVED BY DESIGN METHODS ENGINEER	
GUARDRAIL SPECIAL POST ADAPTER UNIT	